

IN THE CLAIMS

Claim 1 (Original): A process for producing closed-celled rigid polyurethane foams by reacting

- a) crude MDI having an NCO content of from 29 to 33% by weight and a viscosity at 25°C in the range from 150 to 1000 mPa•s with
- b) compounds having at least two hydrogen atoms reactive toward isocyanate groups, in the presence of
- c) catalysts, and
- d) blowing agents,

which comprises the presence, among the compounds having at least two hydrogen atoms reactive toward isocyanate groups, of at least one graft polyol capable of preparation via in-situ polymerization of ethylenically unsaturated monomers in polyether alcohols.

Claim 2 (Original): A process as claimed in claim 1, wherein the amount used of the graft polyols is up to 100% by weight, based on component b.

Claim 3 (Original): A process as claimed in claim 1, wherein the amount used of the graft polyols is from 0.5 to 70% by weight, based in each case on component b.

Claim 4 (Original): A process as claimed in claim 1, wherein the amount used of the graft polyols during the production of rigid polyurethane foams for use in refrigeration equipment is from 3 to 70% by weight, based on component b.

Claim 5 (Original): A process as claimed in claim 1, wherein the amount used of the graft polyols during the production of rigid polyurethane foams for use in sandwich components is from 0.5 to 35% by weight, based on component b.

Claim 6 (Original): A process as claimed in claim 1, wherein the graft polyols have a hydroxy value in the range from 20 to 210 mg KOH/g.

Claim 7 (Original): A process as claimed in claim 1, wherein the graft polyol particle distribution has a maximum at from 0.1 to 8 μm .

Claim 8 (Original): A process as claimed in claim 1, wherein the graft polyols have bimodal particle size distribution with two clearly separated maxima for the polymers.

Claim 9 (Currently Amended): A process as claimed in claim 1, wherein the graft polyols are prepared by in-situ polymerization of ethylenically unsaturated monomers in polyether alcohols having a functionality of from 2 to 8 and having a hydroxy value in the range from 100 to 800 mg KOH/g, obtainable by an addition reaction of alkylene oxides onto H-functional starter substances, the starter substances having been selected from the group ~~comprising~~ consisting of polyfunctional alcohols, sugar alcohols, aliphatic amines, and aromatic amines.

Claim 10 (Original): A process as claimed in claim 1 wherein the graft polyols can be prepared by in-situ polymerization of ethylenically unsaturated monomers in polyether alcohols which are obtained by an addition reaction of alkylene oxides onto tolylenediamine, using basic catalysis.

Claim 11 (Original): A process as claimed in claim 1, wherein the graft polyols can be prepared by in-situ polymerization of ethylenically unsaturated monomers in polyether alcohols which are obtained by an addition reaction of alkylene oxides onto trimethylolpropane, using basic catalysis or catalysis by multimetal cyanide complexes.

Claim 12 (Currently Amended): A rigid polyurethane foam produced by the process of capable of production as claimed in any of claims 1 to 10 claim 1.

Claim 13 (Currently Amended): A graft polyol capable of preparation by in-situ polymerization of ethylenically unsaturated monomers in polyether alcohols having a hydroxy value in the range from 100 to 600 mg KOH/g, obtainable by an addition reaction of alkylene oxides onto H-functional starter substances, the starter substances having been selected from the group ~~comprising~~ consisting of polyfunctional alcohols, sugar alcohols, aliphatic amines, and aromatic amines.

Claim 14 (Original): A graft polyol as claimed in claim 13, by in-situ polymerization of ethylenically unsaturated monomers in polyether alcohols having a hydroxy value in the range from 140 to 240 mg KOH/g, which are obtained by an addition reaction of alkylene oxides onto tolylenediamine.

Claim 15 (Original): A graft polyol as claimed in claim 13, by in-situ polymerization of ethylenically unsaturated monomers in polyether alcohols having a hydroxy value in the range from 140 to 240 mg KOH/g, which are obtained by an addition reaction of alkylene oxides onto trimethylolpropane.